



Docket: MA9673P

ITW

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: /
Fraser et al. / Group Art Unit: 1651
Serial No: 10/783,957 /
Filed: February 20, 2004 / Examiner: unknown
FOR: METHODS OF USING ADIPOSE /
TISSUE-DERIVED CELLS IN THE /
TREATMENT OF CARDIOVASCULAR /
CONDITIONS /

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

I hereby certify that this correspondence is being deposited with the United States Postal Service, First Class mail, postage prepaid, in an envelope addressed to Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on June 3, 2005.
STOUT, UXA, BUYAN & MULLINS, LLP

Kenton R. Mullins, Reg. No. 36,331

INFORMATION DISCLOSURE STATEMENT


Sir:

In accordance with 37 C.F.R. 1.56 and 1.97, Applicants wish to call the attention of the Examiner to the references that are listed on the attached PTO form 1449, copies of which are submitted herewith.

Applicants respectfully request that the cited references be listed on the face of any patent issuing from this application.

These citations do not constitute an admission that the references are relevant or material to the claims, but rather only constitute the closest art of which Applicants are presently aware.

Respectfully Submitted


Kenton R. Mullins
Attorney for Applicants
Registration No. 36,331

June 3, 2005
4 Venture, Suite 300
Irvine, CA 92618
949-450-1750

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /TK/

INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

Docket Number (Optional) MA9673P	Application Number 10/783,957
Applicant(s) Fraser et al.	
Filing Date 02/20/2004	Group Art Unit 1651

*EXAMINER
INITIAL

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

Adame, A., Biondi-Zoccai, G.G., and Baldi, A. (2002). "Pathophysiologic role of myocardial apoptosis in post-infarction left ventricular remodeling." *J Cell Physiol* 193, 145-53.

Aharinejad, S., Marks, S.C., Jr., Bock, P., Mason-Savas, A., MacKay, C.A., Larson, E.K., Jackson, M.E., Luftenstein, M., and Wiesbauer, E. (1995). "CSF-1 treatment promotes angiogenesis in the metaphysis of osteopetrotic (toothless, tl) rats." *Bone* 16, 315-324.

Arvidsson, A., Collin, T., Kirik, D., Kokaia, Z., and Lindvall, O. (2002). "Neuronal replacement from endogenous precursors in the adult brain after stroke." *Nat Med* 8, 963-70.

Ashjian, P.H., Elbarbary, A.S., Edmonds, B., DeUgarte, D., Zhu, M., Zuk, P.A., Lorenz, H.P., Benhaim, P., and Hedrick, M.H. (2003). "In vitro differentiation of human processed liposipate cells into early neural progenitors." *Plast Reconstr Surg* 111 1922-31.

Asou, Y., Rittling, S.R., Yoshitake, H., Tsuji, K., Shinomiya, K., Nifuji, A., Denhardt, D.T., and Noda, M. (2001). "Osteopontin facilitates angiogenesis, accumulation of osteoclasts, and resorption in ectopic bone." *Endocrinology* 142, 1325-1332.

Assady, S., Maor, G., Amit, M., Itskovitz-Eldor, J., Skorecki, K.L., and Tzukerman, M. (2001). "Insulin production by human embryonic stem cells." *Diabetes* 50, 1691-7.

Assmus, B., Schachinger, V., Teupe, C., Britten, M., Lehmann, R., Dobert, N., Grunwald, F., Aicher, A., Urbich, C., Martin, H., Hoelzer, D., Dimmeler, S., and Zeiher, A.M. (2002). "Transplantation of Progenitor Cells and Regeneration Enhancement in Acute Myocardial Infarction (TOPCARE-AMI)." *Circulation* 106, 3009-17.

Athanasopoulos, T., Fabb, S., and Dickson, G. (2000). "Gene therapy vectors based on adeno-associated virus: characteristics and applications to acquired and inherited diseases (review)." *Int J Mol Med* 6, 363-75.

Bagnato, A. and Spinella, F. (2003). "Emerging role of endothelin-1 in tumor angiogenesis." *Trends Endocrinol. Metab* 14, 44-50.

Banfi, A., Bianchi, G., Galotto, M., Cancedda, R., and Quarto, R. (2001). "Bone marrow stromal damage after chemo/radiotherapy: occurrence, consequences and possibilities of treatment." *Leuk Lymphoma* 42, 863-70.

Barker, J.N., Davies, S.M., DeFor, T., Ramsay, N.K., Weisdorf, D.J., and Wagner, J.E. (2001). "Survival after transplantation of unrelated donor umbilical cord blood is comparable to that of human leukocyte antigen-matched unrelated donor bone marrow: results of a matched-pair analysis." *Blood* 97, 2957-61.

Barry, F.P., Boynton, R.E., Haynesworth, S., Murphy, J.M., and Zaia, J. (1999). "The monoclonal antibody SH-2, raised against human mesenchymal stem cells, recognizes an epitope on endoglin (CD105)." *Biochem Biophys Res Commun* 265, 134-9.

EXAMINER

DATE CONSIDERED

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /TK/

SHEET

OF

INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

Docket Number (Optional)

MA9673P

Application Number

10/783,957

Applicant(s)

Fraser et al.

Filing Date

02/20/2004

Group Art Unit

1651

EXAMINER
INITIAL

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

Beecken,W.D., Kramer,W., and Jonas,D. (2000). "New molecular mediators in tumor angiogenesis." J Cell Mol Med 4, 262-269.

Berdel,W.E., Fink,U., Thiel,E., Stunkel,K., Greiner,E., Schwarzkopf,G., Reichert,A., and Rastetter,J. (1982). "Purification of human monocytes by adherence to polymeric fluorocarbon. Characterization of the monocyte-enriched cell fraction." Immunobiology 163, 511-520.

Bickenbach,J.R. and Dunnwald,M. (2000). "Epidermal stem cells: characteristics and use in tissue engineering and gene therapy." Adv Dermatol 16, 159-83.

Bonner-Weir,S. and Sharma,A. (2002). "Pancreatic stem cells." J Pathol. 197, 519-526.

Botta,M., Manetti,F., and Corelli,F. (2000). "Fibroblast growth factors and their inhibitors." Curr. Pharm. Des 6, 1897-1924.

Buschmann,I.R., Busch,H.J., Mies,G., and Hossmann,K.A. (2003). "Therapeutic induction of arteriogenesis in hypoperfused rat brain via granulocyte-macrophage colony-stimulating factor." Circulation 108, 610-615.

Caplan,A.I. and Bruder,S.P. (2001). "Mesenchymal stem cells: building blocks for molecular medicine in the 21st century." Trends Mol Med 7, 259-64.

Carano,R.A. and Filvaroff,E.H. (2003). "Angiogenesis and bone repair." Drug Discov. Today 8, 980-989.

Carmeliet,P. (2000). "Mechanisms of angiogenesis and arteriogenesis." Nat Med 6, 389-395.

Civin,C.I., Strauss,L.C., Fackler,M.J., Trischmann,T.M., Wiley,J.M., and Loken,M.R. (1990). "Positive stem cell selection--basic science." Prog Clin Biol Res 333, 387-401.

Clarke,D. and Frisen,J. (2001). "Differentiation potential of adult stem cells." Curr Opin Genet Dev 11, 575-80.

Commons,G.W., Halperin,B., and Chang,C.C. (2001). "Large-volume liposuction: a review of 631 consecutive cases over 12 years." Plast Reconstr Surg 108, 1753-63.

EXAMINER

DATE CONSIDERED

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /TK/

SHEET

OF

INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

Docket Number (Optional) MA9673P		Application Number 10/783,957
Applicant(s) Fraser et al.		
Filing Date 02/20/2004	Group Art Unit 1651	

*EXAMINER INITIAL	OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)
	D'Ippolito, G., Schiller, P.C., Ricordi, C., Roos, B.A., and Howard, G.A. (1999). "Age-related osteogenic potential of mesenchymal stromal stem cells from human vertebral bone marrow." J Bone Miner Res 14, 1115-22.
	De Ugarte, D.A., Ashjian, P.H., Elbarbary, A., and Hedrick, M.H. (2003). "Future of fat as raw material for tissue regeneration." Ann Plast Surg 50, 215-9.
	Donovan, D., Brown, N.J., Bishop, E.T., and Lewis, C.E. (2001). "Comparison of three in vitro human 'angiogenesis' assays with capillaries formed in vivo." Angiogenesis 4, 113-121.
	Engelholm, S.A., Spang-Thomsen, M., Brunner, N., Nohr, I., and Vindelov, L.L. (1985). "Disaggregation of human solid tumors by combined mechanical and enzymatic methods." Br J Cancer 51, 93-8.
	Eppley, B.L., Smith, P.G., Sadove, A.M., and Delfino, J.J. (1990). "Experimental effects of graft revascularization and consistency on cervicofacial fat transplant survival." J Oral Maxillofac Surg 48, 54-62.
	Eschenhagen, T., Didie, M., Munzel, F., Schubert, P., Schneiderbanger, K., and Zimmermann, W.H. (2002). "3D engineered heart tissue for replacement therapy." Basic Res Cardiol 97 Suppl 1, 1146-1152.
	Falla, N., Van, V., Bierkens, J., Borremans, B., Schoeters, G., and Van Gorp, U. (1993). "Characterization of a 5-fluorouracil-enriched osteoprogenitor population of the murine bone marrow." Blood 82, 3580-91.
	Folkman, J. (1995). "Angiogenesis in cancer, vascular, rheumatoid and other disease." Nat Med 1, 27-31.
	Formanek, M., Temmel, A., Knerer, B., Wilhelm, M., Millesi, W., and Kornfehl, J. (1998). "Magnetic cell separation for purification of human oral keratinocytes: an effective method for functional studies without prior cell subcultivation." Eur Arch. Otorhinolaryngol. 255, 211-215.
	Fukuda, K. (2001). "Development of regenerative cardiomyocytes from mesenchymal stem cells for cardiovascular tissue engineering." Artif Organs 25, 187-93.
	Gaustad, K.G., Boquest, A.C., Anderson, B.E., Gerdes, A.M., and Collas, P. (2004). "Differentiation of human adipose tissue stem cells using extracts of rat cardiomyocytes." Biochem. Biophys. Res Commun. 314, 420-427.
	Geiselhart, A., Neu, S., Buchholz, F., Lang, P., Niethammer, D., and Handgretinger, R. (1996). "Positive selection of CD56+ lymphocytes by magnetic cell sorting." Nat Immun. 15, 227-233.
EXAMINER	DATE CONSIDERED

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

Docket Number (Optional)	Application Number
MA9673P	10/783,957
Applicant(s)	
Fraser et al.	
Filing Date	Group Art Unit
02/20/2004	1651

*EXAMINER INITIAL	OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)
	Greenberg,A.W. and Hammer,D.A. (2001). "Cell separation mediated by differential rolling adhesion." Biotechnol Bioeng 73, 111-24.
	Hagege,A.A., Carrion,C., Menasche,P., Vilquin,J.T., Duboc,D., Marolleau,J.P., Desnos,M., and Bruneval,P. (2003). "Viability and differentiation of autologous skeletal myoblast grafts in ischaemic cardiomyopathy." Lancet 361, 491-2.
	Hemstreet,G.P.3., Enoch,P.G., and Pretlow,T.G.2. (1980). "Tissue disaggregation of human renal cell carcinoma with further isopyknic and isokinetic gradient purification." Cancer Res 40, 1043-9.
	Horwitz,E.M., Prockop,D.J., Gordon,P.L., Koo,W.W., Fitzpatrick,L.A., Neel,M.D., McCarville,M.E., Orchard,P.J., Pyritz,R.E., and Brenner,M.K. (2001). "Clinical responses to bone marrow transplantation in children with severe osteogenesis imperfecta." Blood 97, 1227-31.
	Jaiswal,R.K., Jaiswal,N., Bruder,S.P., Mbalaviele,G., Marshak,D.R., and Pittenger,M.F. (2000). "Adult human mesenchymal stem cell differentiation to the osteogenic or adipogenic lineage is regulated by mitogen-activated protein kinase." J Biol Chem 275, 9645-52.
	Jiang,Y., Jahagirdar,B.N., Reinhardt,R.L., Schwartz,R.E., Keene,C.D., Ortiz-Gonzalez,X.R., Reyes,M., Lenvik,T., Lund,T., Blackstad,M., Du,J., Aldrich,S., Lisberg,A., Low,W.C., Largaespada,D.A., and Verfaillie,C.M. (2002a). Pluripotency of mesenchymal stem cells derived from adult marrow." Nature 418, 41-9.
	Jiang,Y., Vaessen,B., Lenvik,T., Blackstad,M., Reyes,M., and Verfaillie,C.M. (2002b). "Multipotent progenitor cells can be isolated from postnatal murine bone marrow, muscle, and brain." Exp Hematol 30, 896-904.
	Joyner,C.J., Triffitt,J., Puddle,B., and Athanasou,N.A. (1999). "Development of a monoclonal antibody to the aP2 protein to identify adipocyte precursors in tumours of adipose differentiation." Pathol. Res Pract. 195, 461-466.
	Katz,A.J., Hedrick,M.H., Lull,R., and Futrell,J.W. (2001a). "A novel device for the simple and efficient refinement of liposuctioned tissue." Plast Reconstr Surg 107, 595-7.
	Katz,B.E., Bruck,M.C., and Coleman,W.P.3. (2001b). "The benefits of powered liposuction versus traditional liposuction: a paired comparison analysis." Dermatol Surg 27, 863-7.
	Kaushal,S., Amiel,G.E., Guleserian,K.J., Shapira,O.M., Perry,T., Sutherland,F.W., Rabkin,E., Moran,A.M., Schoen,F.J., Atala,A., Soker,S., Bischoff,J., and Mayer,J.E., Jr. (2001). "Functional small-diameter neovessels created using endothelial progenitor cells expanded ex vivo." Nat Med 7, 1035-40.
	Kawamoto,A., Tkebuchava,T., Yamaguchi,J., Nishimura,H., Yoon,Y.S., Milliken,C., Uchida,S., Masue,O., Iwaguro,H., Ma,H Hanley,A., Silver,M., Kearney,M., Losordo,D.W., Isner,J.M., and Asahara,T. (2003). "Intramyocardial transplantation of autologous endothelial progenitor cells for therapeutic neovascularization of myocardial ischemia." Circulation 107, 461-8.

EXAMINER

DATE CONSIDERED

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

INFORMATION DISCLOSURE CITATION <i>(Use several sheets if necessary)</i>		Docket Number (Optional)	Application Number
		MA9673P	10/783,957
		Applicant(s)	
		Fraser et al.	
		Filing Date	Group Art Unit
		02/20/2004	1651

*EXAMINER INITIAL	OTHER DOCUMENTS <i>(Including Author, Title, Date, Pertinent Pages, Etc.)</i>
	Lamouille,S., Mallet,C., Feige,J.J., and Bailly,S. (2002). "Activin receptor-like kinase 1 is implicated in the maturation phase of angiogenesis." Blood 100, 4495-4501.
	Lasch,J., Kullertz,G., and Opalka,J.R. (2000). "Separation of erythrocytes into age-related fractions by density or size? Counterflow centrifugation." Clin Chem Lab Med 38, 629-632.
	Lehner,M. and Holter,W. (2002). "Endotoxin-free purification of monocytes for dendritic cell generation via discontinuous density gradient centrifugation based on diluted Ficoll-Paque Plus." Int Arch. Allergy Immunol. 128, 73-76.
	Lennon,D.P., Haynesworth,S.E., Young,R.G., Dennis,J.E., and Caplan,A.I. (1995). "A chemically defined medium supports in vitro proliferation and maintains the osteochondral potential of rat marrow-derived mesenchymal stem cells." Exp Cell Res 219, 211-22.
	Luskey,B.D., Lim,B., Apperley,J.F., Orkin,S.H., and Williams,D.A. (1990). "Gene transfer into murine hematopoietic stem cells and bone marrow stromal cells." Ann N Y Acad Sci 612, 398-406.
	Luttun,A., Tjwa,M., Moons,L., Wu,Y., Angelillo-Scherrer,A., Liao,F., Nagy,J.A., Hooper,A., Priller,J., De Klerck,B., Compennolle,V., Daci,E., Bohlen,P., Dewerchin,M., Herbert,J.M., Fava,R., Matthys,P., Carmeliet,G., Collen,D., Dvorak,H.F., Hicklin,D.J., and Carmeliet,P. (2002). "Revascularization of ischemic tissues by PlGF treatment, and inhibition of tumor angiogenesis, arthritis and atherosclerosis by anti-Fli1." Nat Med 8, 831-40.
	Mainwaring,G. and Rowley,A.F. (1985). "Separation of leucocytes in the dogfish (Scyliorhinus canicula) using density gradient centrifugation and differential adhesion to glass coverslips." Cell Tissue Res 241, 283-90.
	Majumdar,M.K., Thiede,M.A., Mosca,J.D., Moorman,M., and Gerson,S.L. (1998). "Phenotypic and functional comparison of cultures of marrow-derived mesenchymal stem cells (MSCs) and stromal cells." J Cell Physiol 176, 57-66.
	Marchlinski,F.E., Falcone,R., Izzo,R.V., Reichert,N., Vassallo,J.A., and Eysmann,S.B. (1987). "Experimental myocardial cryoinjury: local electromechanical changes, arrhythmogenicity, and methods for determining depth of injury." Pacing Clin Electrophysiol 10, 886-901.
	Mills,J.D., Fischer,D., and Villanueva,F.S. (2000). "Coronary collateral development during chronic ischemia: serial assessment using harmonic myocardial contrast echocardiography." J Am Coll Cardiol 36, 618-624.
	Mizuno,H., Zuk,P.A., Zhu,M., Lorenz,H.P., Benhaim,P., and Hedrick,M.H. (2002). "Myogenic differentiation by human processed liposiparite cells." Plast Reconstr Surg 109, 199-209.
	Mohr,M., Dalmis,F., Hilgenfeld,E., Oelmann,E., Zuhlsdorf,M., Kratz-Albers,K., Nolte,A., Schmittmann,C., Onaldi-Mohr,D., Cassens,U., Serve,H., Sibrowski,W., Kienast,J., and Berdel,W.E. (2001). "Simultaneous immunomagnetic CD34+ cell selection and B-cell depletion in peripheral blood progenitor cell samples of patients suffering from B-cell non-Hodgkin's lymphoma." Clin Cancer Res 7, 51-57.
EXAMINER	DATE CONSIDERED

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

INFORMATION DISCLOSURE CITATION <i>(Use several sheets if necessary)</i>	Docket Number (Optional)	Application Number
	MA9673P	10/783,957
	Applicant(s) Fraser et al.	
	Filing Date	Group Art Unit
	02/20/2004	1651

*EXAMINER INITIAL	OTHER DOCUMENTS <i>(Including Author, Title, Date, Pertinent Pages, Etc.)</i>
	Monteiro,P., Antunes,A., Goncalves,L.M., and Providencia,L.A. (2003). "Long-term clinical impact of coronary-collateral vessels after acute myocardial infarction." Rev. Port. Cardiol 22, 1051-1061.
	Morizono,K., De Ugarte,D.A., Zhu,M., Zuk,P., Elbarbary,A., Ashjian,P., Benhaim,P., Chen,I.S., and Hedrick,M.H. (2003). "Multilineage cells from adipose tissue as gene delivery vehicles." Hum. Gene Ther. 14, 59-66.
	Mosca,J.D., Hendricks,J.K., Buyaner,D., Davis-Sproul,J., Chuang,L.C., Majumdar,M.K., Chopra,R., Barry,F., Murphy,M., Thiede,M.A., Junker,U., Rigg,R.J., Forestell,S.P., Bohlein,E., Storb,R., and Sandmaier,B.M. (2000). "Mesenchymal stem cells as vehicles for gene delivery." Clin Orthop 71-90.
	Muramatsu,T., Nakamura,A., and Park,H.M. (1998). "In vivo electroporation: a powerful and convenient means of nonviral gene transfer to tissues of living animals (Review)." Int J Mol Med 1, 55-62.
	Murry,C.E., Wiseman,R.W., Schwartz,S.M., and Hauschka,S.D. (1996). "Skeletal myoblast transplantation for repair of myocardial necrosis." J Clin Invest 98, 2512-23.
	Muschler,G.F., Nitto,H., Boehm,C.A., and Easley,K.A. (2001). "Age- and gender-related changes in the cellularity of human bone marrow and the prevalence of osteoblastic progenitors." J Orthop Res 19, 117-25.
	Nagy,J.A., Dvorak,A.M., and Dvorak,H.F. (2003). "VEGF-A(164/165) and PlGF: roles in angiogenesis and arteriogenesis." Trends Cardiovasc Med 13, 169-175.
	Nerem,R.M. and Ensley,A.E. (2004). "The tissue engineering of blood vessels and the heart." Am J Transplant. 4 Suppl 6, 36-42.
	Nishimori,M., Yamada,Y., Hoshi,K., Akiyama,Y., Hoshi,Y., Morishima,Y., Tsuchida,M., Fukuhara,S., and Kodera,Y. (2002). "Health-related quality of life of unrelated bone marrow donors in Japan." Blood 99, 1995-2001.
	Odorico,J.S., Kaufman,D.S., and Thomson,J.A. (2001). "Multilineage differentiation from human embryonic stem cell lines." Stem Cells 19, 193-204.
	Ohgushi,H. and Caplan,A.I. (1999). "Stem cell technology and bioceramics: from cell to gene engineering." J Biomed Mater Res 48, 913-27.
	Orlic,D., Kajstura,J., Chimenti,S., Bodine,D.M., Lerj,A., and Anversa,P. (2001). "Transplanted adult bone marrow cells repair myocardial infarcts in mice." Ann N Y Acad Sci 938, 221-9.

EXAMINER	DATE CONSIDERED
----------	-----------------

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

INFORMATION DISCLOSURE CITATION <i>(Use several sheets if necessary)</i>	Docket Number (Optional)		Application Number
	MA9673P		10/783,957
	Applicant(s)		
	Fraser et al.		
Filing Date		Group Art Unit	
02/20/2004		1651	

*EXAMINER INITIAL	OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)
	Pera, M.F., Reubino, B., and Tronson, A. (2000). "Human embryonic stem cells." J Cell Sci 113 (Pt 1), 5-10.
	Pipp, F., Heil, M., Issbrucker, K., Ziegelhoeffer, T., Martin, S., van den, H.J., Weich, H., Fernandez, B., Golomb, G., Carmeliet, P., Schaper, W., and Clauss, M. (2003). "VEGFR-1-selective VEGF homologue PIGF is arteriogenic: evidence for a monocyte-mediated mechanism." Circ. Res 92, 378-385.
	Pittenger, M.F., Mackay, A.M., Beck, S.C., Jaiswal, R.K., Douglas, R., Mosca, J.D., Moorman, M.A., Simonetti, D.W., Craig, S., and Marshak, D.R. (1999). "Multilineage potential of adult human mesenchymal stem cells." Science 284, 143-7.
	Prince, H.M., Bashford, J., Wall, D., Rischin, D., Parker, N., Toner, G.C., Seymour, J.F., Blakey, D., Haylock, D., Simmons, P., Francis, P., Wolf, M., Januszewicz, E.H., Richardson, G., Scarlett, J., and Briggs, P. (2002). "Isolex 300i CD34-selected cells to support multiple cycles of high-dose therapy." Cytotherapy 4, 137-45.
	Qian, X., Jin, L., and Lloyd, R.V. (1998). "Percoll Density Gradient-Enriched Populations of Rat Pituitary Cells: Interleukin 6 Secretion, Proliferative Activity, and Nitric Oxide Synthase Expression." Endocr. Pathol. 9, 339-346.
	Quirici, N., Soligo, D., Bossolasco, P., Servida, F., Lumini, C., and Dell'Alberi, G.L. (2002). "Isolation of bone marrow mesenchymal stem cells by anti-nerve growth factor receptor antibodies." Exp Hematol 30, 783-91.
	Rajnoch, C., Chachques, J.C., Berrebi, A., Bruneval, P., Benoit, M.O., and Carpentier, A. (2001). "Cellular therapy reverses myocardial dysfunction." J Thorac Cardiovasc Surg 121, 871-8.
	Rangappa, S., Fen, C., Lee, E.H., Bongso, A., and Wei, E.S. (2003). "Transformation of adult mesenchymal stem cells isolated from the fatty tissue into cardiomyocytes." Ann Thorac. Surg 75, 775-779.
	Remme, W.J. (2000). "Overview of the relationship between ischemia and congestive heart failure." Clin Cardiol 23, 4-8.
	Reyes, M., Lund, T., Lenvik, T., Aguiar, D., Koodie, L., and Verfaillie, C.M. (2001). "Purification and ex vivo expansion of postnatal human marrow mesodermal progenitor cells." Blood 98, 2615-2625.
	Russell, S.W., Doe, W.F., Hoskins, R.G., and Cochrane, C.G. (1976). "Inflammatory cells in solid murine neoplasms. I. Tumor disaggregation and identification of constituent inflammatory cells." Int J Cancer 18, 322-30.
	Scholz, D., Cai, W.J., and Schaper, W. (2001). "Arteriogenesis, a new concept of vascular adaptation in occlusive disease." Angiogenesis. 4, 247-257.

EXAMINER	DATE CONSIDERED
----------	-----------------

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

Docket Number (Optional)	Application Number
MA9673P	10/783,957
Applicant(s)	
Fraser et al.	
Filing Date	Group Art Unit
02/20/2004	1651

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

*EXAMINER INITIAL	
	Scholz,D., Ziegelhoeffer,T., Helisch,A., Wagner,S., Friedrich,C., Podzuweit,T., and Schaper,W. (2002). "Contribution of arteriogenesis and angiogenesis to postocclusive hindlimb perfusion in mice." J Mol Cell Cardiol 34, 775-787.
	Scholz,D., Elsaesser,H., Sauer,A., Friedrich,C., Luttmann,A., Carmeliet,P., and Schaper,W. (2003). "Bone marrow transplantation abolishes inhibition of arteriogenesis in placenta growth factor (PlGF) -/- mice." J Mol Cell Cardiol 35, 177-184.
	Schwartz,R.E., Reyes,M., Koodie,L., Jiang,Y., Blackstad,M., Lund,T., Lenvik,T., Johnson,S., Hu,W.S., and Verfaillie,C.M. (2002). "Multipotent adult progenitor cells from bone marrow differentiate into functional hepatocyte-like cells." J Clin Invest 109, 1291-302.
	Schweitzer,C.M., van, der, Schoot, Ce, Drager,A.M., van, der, Valk, P, Zevenbergen,A., Hooibrink,B., Westra,A.H., and Langenhuijsen,M.M. (1995). "Isolation and culture of human bone marrow endothelial cells." Exp Hematol 23, 41-8.
	Sekiya,I., Larson,B.L., Smith,J.R., Pochampally,R., Cui,J.G., and Prockop,D.J. (2002). "Expansion of human adult stem cells from bone marrow stroma: conditions that maximize the yields of early progenitors and evaluate their quality." Stem Cells 20 530-541.
	Sergeant,P., Blackstone,E., and Meyns,B. (1997). "Early and late outcome after CABG in patients with evolving myocardial infarction." Eur J Cardiothorac. Surg 11, 848-856.
	Shigematsu,S., Yamauchi,K., Nakajima,K., Iijima,S., Aizawa,T., and Hashizume,K. (1999). "IGF-1 regulates migration and angiogenesis of human endothelial cells." Endocr. J 46 Suppl, S59-S62.
	Smith,J.W. (1997). "Apheresis techniques and cellular immunomodulation." Ther. Apher. 1, 203-206.
	Smith,R.J., and Sweetenham,J.W. (1995). "A mononuclear cell dose of 3 x 10(8)/kg predicts early multilineage recovery in patients with malignant lymphoma treated with carmustine, etoposide, Ara-C and melphalan (BEAM) and peripheral blood progenitor cell transplantation." Exp Hematol 23, 1581-8.
	Smits,G., Holzgreve,W., and Hahn,S. (2000). "An examination of different Percoll density gradients and magnetic activated cell sorting (MACS) for the enrichment of fetal erythroblasts from maternal blood." Arch. Gynecol. Obstet. 263, 160-163.
	Sodian,R., Lemke,T., Fritsche,C., Hoerstrup,S.P., Fu,P., Potapov,E.V., Hausmann,H., and Hetzer,R. (2002). "Tissue-engineering bioreactors: a new combined cell-seeding and perfusion system for vascular tissue engineering." Tissue Eng 8, 863-870.
	Soli,M., Blanco,L., Riggert,J., Martinez-Clavel,A., Lucas,C., Lunghi,M., Belloni,M., Wolf,C., van Waeg,G., and Antoon,M. (2001). "A multicentre evaluation of a new filtration protocol for leucocyte depletion of high-haematocrit red blood cells collected by an automated blood collection system." Vox Sang. 81, 108-112.

EXAMINER

DATE CONSIDERED

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

Docket Number (Optional)	Application Number
MA9673P	10/783,957
Applicant(s)	
Fraser et al.	
Filing Date	Group Art Unit
02/20/2004	1651

*EXAMINER INITIAL	OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)
	Stamm,C., Westphal,B., Kleine,H.D., Petzsch,M., Kittner,C., Klinge,H., Schumichen,C., Nienaber,C.A., Freund,M., and Steinhoff,G. (2003). "Autologous bone-marrow stem-cell transplantation for myocardial regeneration." Lancet 4, 45-46.
	Sundberg,C., Kowanetz,M., Brown,L.F., Detmar,M., and Dvorak,H.F. (2002). "Stable expression of angiopoietin-1 and other markers by cultured pericytes: phenotypic similarities to a subpopulation of cells in maturing vessels during later stages of angiogenesis in vivo." Lab Invest 82, 387-401.
	Toma,J.G., Akhavan,M., Fernandes,K.J., Barnabe-Heider,F., Sadikot,A., Kaplan,D.R., and Miller,F.D. (2001). "Isolation of multipotent adult stem cells from the dermis of mammalian skin." Nat Cell Biol 3, 778-842.
	Twentyman,P.R. and Yuhas,J.M. (1980). "Use of bacterial neutral protease for disaggregation of mouse tumours and multicellular tumor spheroids." Cancer Lett 9, 225-8.
	Van,M., V. Meyer,E., Dosogne,H., and Burvenich,C. (2001). "Separation of bovine bone marrow into maturation-related myeloid cell fractions." Vet. Immunol. Immunopathol. 83, 11-17.
	Walther,W. and Stein,U. (2000). "Viral vectors for gene transfer: a review of their use in the treatment of human diseases." Drugs 60, 249-71.
	Wang,L., Zeng,H., Wang,P., Soker,S., and Mukhopadhyay,D. (2003). "Neuropilin-1-mediated vascular permeability factor/vascular endothelial growth factor-dependent endothelial cell migration." J Biol Chem 278, 48848-48860.
	Watts,M.J., Somerville,T.C., Ings,S.J., Ahmed,F., Khwaja,A., Yong,K., and Linch,D.C. (2002). "Variable product purity and functional capacity after CD34 selection: a direct comparison of the ClinIMACS (v2.1) and Isoplex 300i (v2.5) clinical scale devices." Br J Haematol 118, 117-23.
	Williams,S.K., McKenney,S., and Jarrell,B.E. (1995). "Collagenase lot selection and purification for adipose tissue digestion." Cell Transplant 4, 281-9.
	Xiong,B., Gong,L.L., Zhang,F., Hu,M.B., and Yuan,H.Y. (2002). "TGF beta1 expression and angiogenesis in colorectal cancer tissue." World J Gastroenterol. 8, 496-498.
	Ye,Q., Zund,G., Benedikt,P., Jockenhoevel,S., Hoerstrup,S.P., Sakyama,S., Hubbell,J.A., and Turina,M. (2000). "Fibrin gel as a three dimensional matrix in cardiovascular tissue engineering." Eur J Cardiothorac Surg 17, 587-91.
	Young,H.E., Steele,T.A., Bray,R.A., Hudson,J., Floyd,J.A., Hawkins,K., Thomas,K., Austin,T., Edwards,C., Cuzzourt,J., Duenzl,M., Lucas,P.A., and Black,A.C., Jr. (2001). "Human reserve pluripotent mesenchymal stem cells are present in the connective tissues of skeletal muscle and dermis derived from fetal, adult, and geriatric donors." Anat Rec 264, 51-62.
EXAMINER	DATE CONSIDERED

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

Docket Number (Optional)

MA9673P

Application Number

10/783,957

Applicant(s)

Fraser et al.

Filing Date

02/20/2004

Group Art Unit

1651

*EXAMINER

INITIAL

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

Zimmermann, W.H., Didie, M., Wasmeier, G.H., Nixdorff, U., Hess, A., Melnychenko, I., Boy, O., Neuher, W.L., Weyand, M., and Eschenhagen, T. (2002). "Cardiac grafting of engineered heart tissue in syngenic rats." *Circulation* 106, 1151-1157.

Zimmermann, W.H., Melnychenko, I., and Eschenhagen, T. (2004). "Engineered heart tissue for regeneration of diseased hearts." *Biomaterials* 25, 1639-1647.

Zuk, P.A., Zhu, M., Ashjian, P., De Ugarte, D.A., Huang, J.I., Mizuno, H., Alfonso, Z.C., Fraser, J.K., Benhaim, P., and Hedrick, M.H. (2002). "Human adipose tissue is a source of multipotent stem cells." *Mol Biol Cell* 13, 4279-95.

Zuk, P.A., Zhu, M., Mizuno, H., Huang, J., Futrell, J.W., Katz, A.J., Benhaim, P., Lorenz, H.P., and Hedrick, M.H. (2001). "Multilineage cells from human adipose tissue: implications for cell-based therapies." *Tissue Eng* 7, 211-28.

U.S. Application No. 10/316,127, filed 12/4/2002, Fraser et al.
Title: Systems and Methods for Treating Patients with Processed Liposprate Cells.

EXAMINER

/Taeyoon Kim/

DATE CONSIDERED

09/17/2008

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /TK/

SHEET

OF